

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 (currently amended). A half-bridge circuit, comprising:

a first semiconductor body having a first MOS transistor that is integrated in said first semiconductor body, said first MOS transistor being a vertically designed n-conducting MOS transistor, said first semiconductor body further having a front side and a rear side, said first MOS transistor having a drive connection and a first load path connection accessible at said front side of said first semiconductor body, said first MOS transistor having a second load path connection accessible at said rear side of said first semiconductor body;

a second semiconductor body having a second MOS transistor that is integrated in said second semiconductor body, said second MOS transistor being a vertically designed p-conducting MOS transistor, said second semiconductor body further having a front side and a rear side, said second MOS transistor having a drive connection and a first load path

connection accessible at said front side of said second semiconductor body, said second MOS transistor having a second load path connection accessible at said rear side of said second semiconductor body;

a drive circuit for driving said first MOS transistor and said second MOS transistor;

a common connection plate to which said first MOS transistor and said second MOS transistor are applied; and

a first connection terminal and a second connection terminal;

said first MOS transistor and said second MOS transistor being connected in series between said first connection terminal and said second connection terminal.

2 (canceled).

3. (currently amended). ~~The half-bridge circuit according to claim 1, comprising:~~ A half-bridge circuit, comprising:

a first semiconductor body having a first MOS transistor that is integrated in said first semiconductor body, said first

MOS transistor being a vertically designed n-conducting MOS transistor and having a first load path connection;

a second semiconductor body having a second MOS transistor that is integrated in said second semiconductor body, said second MOS transistor being a vertically designed p-conducting MOS transistor and having a first load path connection;

a drive circuit for driving said first MOS transistor and said second MOS transistor;

a common connection plate to which said first MOS transistor and said second MOS transistor are applied;

a first connection terminal and a second connection terminal, said first MOS transistor and said second MOS transistor being connected in series between said first connection terminal and said second connection terminal;

a capacitor connected between said first load path connection of said first transistor and said first load path connection of said second transistor, said capacitor applied to said first semiconductor body and to said second semiconductor body, said capacitor having a first connection connected to

said first semiconductor body, and said capacitor having a
second connection connected to said second semiconductor
body.

4 (canceled).

5 (currently amended). The half-bridge circuit according to
claim 3 4, comprising:

a bonding wire electrically connecting said first connection
of said capacitor to said first semiconductor body; and

a bonding wire electrically connecting said second connection
of said capacitor to said second semiconductor body.

6 (currently amended). The half-bridge circuit according to
claim 3 4, comprising:

a first layer electrically connecting said first connection
of said capacitor to said first semiconductor body; and

a second layer electrically connecting said second connection
of said capacitor to said second semiconductor body;

said first layer and said second layer being made of a material selected from the group consisting of a soldering material and an electrically conductive adhesive.

7 (original). The half-bridge circuit according to claim 1, comprising an electrically conductive adhesive that bonds said first semiconductor body and said second semiconductor body onto said common connection plate.

8 (original). The half-bridge circuit according to claim 1, comprising an electrically conductive adhesive that solders said first semiconductor body and said second semiconductor body onto said common connection plate.

9 (currently amended). The half-bridge circuit according to claim 1, comprising:

a third semiconductor body into which said drive circuit is integrated;

~~said first semiconductor body having a front side, and~~

said third semiconductor body being applied to said front side of said first semiconductor body.

10 (original). The half-bridge circuit according to claim 1, comprising: a common housing surrounding said first semiconductor body, said second semiconductor body, and said drive circuit.

11 (currently amended). The half-bridge circuit according to claim 1, comprising:

a capacitor,

~~said first transistor having a first load path connection,~~

~~said second transistor having a second load path connection,~~
and

~~said~~ capacitor connected between said first load path connection of said first transistor and said first load path connection of said second transistor.

12 (currently amended). A switching regulator, comprising:

a half-bridge circuit, including:

a first semiconductor body having a first MOS transistor that is integrated in said first semiconductor body,

said first MOS transistor being a vertically designed n-conducting MOS transistor, said first semiconductor body further having a front side and a rear side, said first MOS transistor having a drive connection and a first load path connection accessible at said front side of said first semiconductor body, said first MOS transistor having a second load path connection accessible at said rear side of said first semiconductor body;

a second semiconductor body having a second MOS transistor that is integrated in said second semiconductor body, said second MOS transistor being a vertically designed p-conducting MOS transistor, said second semiconductor body further having a front side and a rear side, said second MOS transistor having a drive connection and a first load path connection accessible at said front side of said second semiconductor body, said second MOS transistor having a second load path connection accessible at said rear side of said second semiconductor body;

a drive circuit for driving said first MOS transistor and said second MOS transistor;

a common connection plate to which said first MOS transistor and said second MOS transistor are applied; and

a first connection terminal and a second connection terminal;

said first MOS transistor and said second MOS transistor being connected in series between said first connection terminal and said second connection terminal.

13 (new). A switching regulator, comprising:

a half-bridge circuit, including:

a first semiconductor body having a first MOS transistor that is integrated in said first semiconductor body, said first MOS transistor being a vertically designed n-conducting MOS transistor and having a first load path connection;

a second semiconductor body having a second MOS transistor that is integrated in said second semiconductor body, said second MOS transistor being a

vertically designed p-conducting MOS transistor and
having a first load path connection;

a drive circuit for driving said first MOS transistor
and said second MOS transistor;

a common connection plate to which said first MOS
transistor and said second MOS transistor are applied;

a first connection terminal and a second connection
terminal, said first MOS transistor and said second MOS
transistor being connected in series between said first
connection terminal and said second connection terminal;

a capacitor connected between said first load path
connection of said first transistor and said first load
path connection of said second transistor, said
capacitor applied to said first semiconductor body and
to said second semiconductor body, said capacitor having
a first connection connected to said first semiconductor
body, and said capacitor having a second connection
connected to said second semiconductor body.